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SECURITY INFORMATION

INTELLIGENCE MEMORANDUM

PRODUCTION AND UTILIZATION OF POTATOES
IN THE SOVIET BLOC
1952

CIA/RR IM-378

23 September 1953

WARNING

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SECURITY INFORMATION

PRODUCTION AND UTILIZATION OF POTATOES IN THE SOVIET BLOC, 1952*

Summary

The Soviet Bloc, which is the largest potato-producing area in the world, accounts for about 55 percent of the total world supply. Potato production in the Bloc has fluctuated since 1944, reaching a high of about 167.9 million metric tons in 1950 but dropping to 148.3 million and 148.5 million tons, respectively, in 1951 and 1952 because of adverse weather conditions in the USSR in 1951 and in the Satellites in 1952. Prewar production in those areas now constituting the Bloc averaged 161.8 million metric tons.

Potato acreage in the Soviet Bloc in 1952 has remained at the 1951 level of about 18 million hectares,** which is 7 percent above the prewar level.*** Potato yields for the Bloc, however, have failed to reach the prewar level at any time during the postwar period.

The USSR accounted for about 53 percent of the total potato production in the Soviet Bloc in 1952 and produced about 78.9 million metric tons, which is a 12-percent increase over the 1951 level and a 3-percent increase above the prewar level.

The European Satellites accounted for 27 percent of the total potato production in 1952, but because of severe drought and poor harvesting conditions, they produced only 40 million metric tons, which is a decrease of 17 percent below the 1951 total and 39 percent below the prewar level.

Communist China accounted for 20 percent of the total potato production in the Soviet Bloc in 1952 and produced about 29.6 million

* This memorandum contains information available as of 1 April 1953. The data do not represent weighted quantities but are estimates and approximations. The range of fluctuation of estimates is at least plus or minus 10 percent or more.

** One hectare equals 2.471 acres.

*** All acreage figures are in terms of harvested acreage.

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metric tons,* which is a slight increase (less than 1 percent) above the 1951 total but a 30-percent increase above the prewar level.

Most of the countries producing potatoes in the Soviet Bloc have plans for increasing production. To a large extent, these production plans appear unrealistic. The Soviet Fifth Five Year Plan (1951-55), for example, calls for a 40- to 45-percent increase. Because no plans for acreage increases have been indicated, the assumption is that any increase in production will result primarily from increased yields. If acreage is not increased, the planned output appears unattainable because it would require a yield increase which even under the best of conditions could not be attained in so short a period of time.

During the prewar period the Soviet Bloc normally produced enough potatoes to meet all domestic needs and had a surplus left over for export. During most of the postwar years, however, the potato supply has been inadequate in many of the Bloc countries as a result of poor harvests and the resistance of the peasants in some of the European Satellites in fulfilling their delivery quotas to the state.

In 1952, about 29 percent of the 148.4 million metric tons of potatoes available to the Soviet Bloc was accounted for as seed and waste,** 22 percent was fed to livestock, 4 percent was utilized by industry, and 45 percent was made available for human consumption.

Potatoes represent an important part of the daily diet in the Soviet Bloc, ranking second in importance after grain as a major food in the USSR and the European Satellites. In some of the European Satellites, besides being an important food item, potatoes are utilized extensively in the feeding of hogs. The importance of potatoes as a feed in the large hog-producing countries such as Poland and East Germany is indicated by the fact that the decrease in the potato supply available for feed in those countries during the year 1952-53 was reflected in a substantial decrease in hog numbers.

In spite of the critical supply situation during the past few years, exports of potatoes from the Soviet Bloc have averaged about 100,000 to 200,000 metric tons to all destinations annually.

* Sweet potatoes account for about 85 percent of the total potato production in Communist China.

** On the basis of approximately 12 percent seed and 17 percent waste.

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Because of the perishable nature of potatoes and the stringent conditions necessary for even short-term storage, it is highly improbable that there are any reserves maintained in the Soviet Bloc for stockpiling purposes.

1. Postwar Trends in Production.

Potato production in the Soviet Bloc has fluctuated erratically since the war period (1940-44), when the average was 159.4 million metric tons. Production reached a high of 167.9 million metric tons in 1950 and then dropped 12 percent in 1951 to 148.3 million metric tons. This loss was due primarily to the poor potato crop in the USSR during the 1951 season. Prewar (1935-39) production* in those areas now constituting the Soviet Bloc averaged 161.8 million metric tons.

Although potato production has fluctuated considerably since the end of World War II, yields for the Soviet Bloc as a whole have remained below the prewar level. Increased acreages have accounted for most of the gain in production. Yields for the Bloc in 1951 averaged 82.3 centners per hectare as compared with the prewar average of 100.7 centners per hectare.**

Potato production remained high during World War II because of the extensive cultivation of the crop in both rural and urban areas. In the USSR, for example, the city and village population planted every available plot of land in and around homes and factories and along roads, principally to potatoes, cabbage, or other vegetables.

Potato yields for the Soviet Bloc began to decrease soon after the end of the war because of fertilizer shortages throughout the Bloc and an opposition to the land reform program in some of the European Satellites.

* See Table 1, p. 5, below.

** Potato yields indicated in this section of the memorandum are obtained by dividing potato production by the acreage figure.

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2. 1952 Production.

Potato production in the Soviet Bloc in 1952 is estimated at about 148.5 million metric tons. This figure is an increase of approximately 0.2 million metric tons (less than 1 percent) above the 1951 figure of 148.3 million metric tons but a decrease of 16.4 million metric tons (10 percent) below the prewar average of about 164.9 million metric tons. (See Table 1.)*

Potato production in the Soviet Bloc in 1952, distributed over a population of 782 million, indicates a gross per capita supply** of 190 kilograms, which is almost equal to the 191 kilograms per capita indicated by the distribution of the 1951 production over 778 million people. The 1952 gross per capita supply is, however, 12 percent below the average gross per capita supply of 215 kilograms available to 767 million people during the prewar years.

Potato acreage in the Soviet Bloc in 1952 is estimated at about 18 million hectares. This acreage is approximately equal to the 1951 total and is 7 percent above the prewar average of 16.9 million hectares.

Potato yields in the Soviet Bloc are estimated at about 82.5 centners per hectare as compared with the 1951 yield of 82.4 centners per hectare and the prewar average of 97.6 centners per hectare.

a. USSR.

Potato production in the USSR in 1952 is estimated at about 78.9 million metric tons, a 12-percent increase above the 1951 figure of 70.7 million metric tons and a 3-percent increase above the prewar average of 76.9 million metric tons. The 1951 potato crop was extremely poor because of adverse weather conditions. The increase in 1952, however, is not indicative of the ability of the USSR to increase potato yields.

* Table 1 follows on p. 5.

** The gross per capita supply indicates the supply available per person for all purposes, including industrial use, feed, seed, waste, export, stockpiling, and human consumption as contrasted with the net per capita supply, which indicates the supply available per person after deducting the exports, industrial uses, feed, seed, waste, and stockpiling.

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Table 1

Acreage, Yields, and Production of Potatoes in the Soviet Bloc
 Prewar Years Compared with 1951 and 1952

	Area (Thousand Hectares)	Prewar			1951			1952 a/		
		Yields (Centners per Hectare)	Production (Thousand Metric Tons)	Area (Thousand Hectares)	Yields (Centners per Hectare)	Production (Thousand Metric Tons)	Area (Thousand Hectares)	Yields (Centners per Hectare)	Production (Thousand Metric Tons)	Area (Thousand Hectares)
USSR	9,001.1 b/	85.4	76,860.0	9,470.0	74.7	70,720.0	9,470.0	83.3	78,880.0	
Poland	2,752.0 c/	138.1	37,998.4	2,630.0	103.4	27,200.0	2,600.0	91.0	23,660.0	
East Germany	809.4 c/	168.4	13,627.2	838.5	133.0	11,152.0	806.5	126.0	10,161.0	
Czechoslovakia	758.0 c/	133.3	10,102.5	607.0	107.5	6,528.0	600.0	75.1	4,506.0	
Hungary	295.0 c/	73.4	2,166.1	275.2	73.4	2,020.0	275.8	35.6	981.0	
Romania	154.2 c/	84.8	1,307.6	182.1	59.7	1,088.0	180.8	36.1	652.0	
Bulgaria	18.6 c/	60.6	112.7	18.2	56.8	103.4	18.1	34.1	61.7	
Albania	0.4 c/	55.0	2.2	1.2	34.2	4.1	1.2	20.8	2.5	
Total European Satellites	4,787.6	136.4	65,316.7	4,552.2	105.7	48,095.5	4,482.4	89.3	40,026.0	
Communist China d/ e/ f/	3,098.8	73.3	22,700.0	4,007.5	73.6	29,500.0	4,007.5	73.9	29,600.0	
Total Soviet Bloc	16,887.5	97.6	164,876.7	18,029.7	82.3	148,315.5	17,959.9	82.7	148,506.0	

- a. Preliminary.
 b. Postwar boundaries, 1938 only.
 c. Postwar boundaries, 1935-39 average.
 d. Postwar boundaries, 1931-37 average.
 e. Includes sweet and Irish potatoes.
 f. Includes Manchuria.

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Potato acreage in the USSR in 1952 is estimated at about 9.5 million hectares. This acreage is equal to the 1951 total and 6 percent above the prewar average of 9 million hectares. It is estimated that the USSR accounted for about 53 percent of the total potato production in the Soviet Bloc in 1952 on 53 percent of the total potato acreage in the Bloc.

As seen in Table 2,* potatoes are grown throughout the USSR in varying acreages, with the European areas of the USSR accounting for the largest share of the acreage and production. In 1952 the regions comprising the European USSR were responsible for about 88 percent of the total Soviet production and 86 percent of the total Soviet acreage. Of these totals, the Central European Economic Region (VII)** accounted for 29 percent of the production and 32 percent of the area; the Ukraine (III), 24 percent of the production and 23 percent of the area; and Belorussia (IIb), 15 percent of the production and 12 percent of the area. The largest potato-producing area in the Asiatic USSR in 1952 was located in Western Siberia (IX), which accounted for only 4 percent of both the production and the area within the USSR.

Potato production in the European USSR in 1952 represented a 1-percent decrease below prewar production, although acreage increased 1 percent over that period. In the Asiatic USSR, however, potato production and acreage increased 46 and 44 percent, respectively, over the prewar average. This increase indicates the shift in acreage and production from the western to the eastern areas of the USSR following the occupation during the war of many important potato-producing areas in Western USSR.

Potato yields in the USSR increased to 83.3 centners per hectare in 1952, an increase of 12 percent above the 1951 yield of 74.7 centners per hectare but 2 percent below the prewar average of 85.4 centners per hectare.

b. European Satellites.

Potatoes are grown extensively throughout the European Satellites. Poland, East Germany, and Czechoslovakia account for the largest share of the acreage and production. (See Table 3.)*** Potato

* Table 2 follows on p. 7.

** The economic regions referred in this memorandum are those defined and numbered on CIA Map 12048, 9-51, USSR: Economic Regions.

*** Table 3 follows on p. 8.

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Table 2
Acreage and Production of Potatoes by Economic Areas in the USSR
Prewar Years Compared with 1951 and 1952

Area	Prewar a/			1951			1952 b/		
	Area (Thousand Hectares)	Production (Thousand Metric Tons)	Area (Thousand Hectares)	Production (Thousand Metric Tons)	Area (Thousand Hectares)	Production (Thousand Metric Tons)	Percent of Total	Production (Thousand Metric Tons)	Percent of Total
European USSR									
Ia Northwestern	197.0	1,637.0	248.1	2,058.0	248.1	2,295.4	2.62	2,295.4	2.91
Ib Northern	114.2	999.9	120.3	1,011.3	120.3	1,128.0	1.27	1,128.0	1.43
IIa Baltic	447.8	5,390.8	454.6	4,879.7	454.6	5,442.7	4.80	5,442.7	6.90
IIb Belorussia	1,145.1	11,972.2	1,130.7	10,296.8	1,130.7	11,484.9	11.94	11,484.9	14.56
III Ukraine	2,191.3	19,734.7	2,145.9	16,640.4	2,145.9	18,560.5	22.66	18,560.5	23.53
IV Lower Don-North Caucasus	211.8	1,220.0	242.4	1,223.5	242.4	1,364.6	2.56	1,364.6	1.73
VI Volga Region	438.0	2,712.8	445.1	2,390.3	445.1	2,666.1	4.70	2,666.1	3.38
VII Central USSR	3,002.6	23,631.1	3,011.5	20,827.0	3,011.5	23,230.2	31.80	23,230.2	29.45
VIII Urals (European)	334.6	2,727.9	359.9	2,553.0	359.9	2,847.6	3.80	2,847.6	3.61
Total European USSR	8,082.4	70,026.4	8,158.5	61,880.0	8,158.5	69,020.0	86.15	69,020.0	87.50
Asiatic USSR									
VIII Urals (Asiatic)	165.8	1,455.7	179.9	1,343.7	179.9	1,498.7	1.90	1,498.7	1.90
IX Western Siberia	352.8	2,469.6	402.5	2,475.2	402.5	2,760.8	4.25	2,760.8	3.50
Xa Kazakh SSR	102.1	658.5	179.9	997.2	179.9	1,112.2	1.90	1,112.2	1.41
Xb Central Asia	42.3	464.5	81.4	912.2	81.4	1,017.5	0.86	1,017.5	1.29
XI Eastern Siberia	132.1	877.1	227.3	1,364.9	227.3	1,522.4	2.40	1,522.4	1.93
XII Far East	74.4	535.7	145.8	968.9	145.8	1,080.7	1.54	1,080.7	1.37
V Transcaucasus	49.2	373.4	94.7	777.9	94.7	867.7	1.00	867.7	1.10
Total Asiatic USSR	918.7	6,834.5	1,311.5	8,840.0	1,311.5	9,860.0	13.85	9,860.0	12.50
Total USSR	9,001.1	76,860.9	9,470.0	70,720.0	9,470.0	78,880.0	100.00	78,880.0	100.00

a. Postwar boundaries, 1938 only.
Preliminary.

Table 3

Percentage Distribution of Acreage and Production of Potatoes in the European Satellites
Prewar Years Compared with 1951 and 1952

Area	Prewar a/		1951		1952 b/		Percent
	Acreage	Production	Acreage	Production	Acreage	Production	
Poland	57.5	58.2	57.8	56.5	58.0	59.1	
East Germany	16.9	20.9	18.4	23.2	18.0	25.4	
Czechoslovakia	15.8	15.4	13.3	13.6	13.4	11.3	
Hungary	6.2	3.3	6.1	4.2	6.2	2.4	
Rumania	3.2	2.0	4.0	2.3	4.0	1.6	
Bulgaria	0.4	0.2	0.4	0.2	0.4	0.2	
Albania	c/	c/	c/	c/	c/	c/	
Total	100.0	100.0	100.0	100.0	100.0	100.0	

a. Postwar boundaries, 1935-39 average.

b. Preliminary.

c. Less than one-tenth of 1 percent.

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production in the European Satellites in 1952 is estimated at about 40 million metric tons, a decrease of 17 percent below the 1951 figure of 48.1 million metric tons and 39 percent below the prewar average of 65.3 million metric tons. (See Table 1.) This large decrease in production resulted from bad weather throughout Eastern Europe during the 1952 season. The combination of a long summer drought and heavy rains, snow, and subnormal temperatures during the fall harvesting season resulted in one of the poorest crops of the postwar period.

Potato acreages in the European Satellites in 1952 were estimated to be about 4.5 million hectares, which is 2 percent below the 1951 total of 4.6 million hectares and 6 percent below the prewar average of 4.8 million hectares. (See Table 1.) The slight decrease in the 1952 acreage below the 1951 level was due primarily to the abandonment of the sown acreage destroyed by spring frosts.

The European Satellites accounted for approximately 27 percent of the total potato production in the Soviet Bloc in 1952 on 25 percent of the total acreage.

Potato yields in the European Satellites during 1952 dropped to 89.3 centners per hectare, 16 percent below the 1951 yield of 105.7 centners per hectare and 35 percent below the prewar average of 136.4 centners per hectare. Potato yields in the European Satellites as a whole during the postwar period have failed to reach the prewar level. Bulgaria (1947 and 1948) and Hungary (1948 and 1951) were the only countries either to equal or to exceed their prewar yield during the postwar period. Table 1 shows that potato yields in Poland and East Germany are generally higher than in the other countries of the Soviet Bloc. This is due primarily to the more favorable weather and soil conditions for the cultivation of potatoes which prevail in these two countries, as well as the experience in growing the crops and the development of better varieties suited to their climatic and soil conditions.

c. Communist China.

Potato production in Communist China in 1952 is estimated at about 29.6 million metric tons, which is a slight increase (less than 1 percent) above the 1951 figure of 29.5 million metric tons and a 30-percent increase above the prewar average of 22.7 million metric tons.

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Potato acreage in Communist China in 1952 is estimated to be about 4 million hectares. This acreage is equal to the 1951 total and is a 29-percent increase above the prewar average of 3.1 million hectares.* It is estimated that Communist China accounted for 20 percent of the total potato production in the Soviet Bloc in 1952 on 22 percent of the total potato acreage in the Bloc.

Sweet potatoes are grown extensively in Communist China and account for about 85 percent of the total potato crop. The principal growing area includes the provinces of Hopeh, Honan, Shantung, Szechwan, Kiangsi, Hunan, Swantung, and Fukien. Because Irish potatoes constitute a rather new food crop in Communist China, they are not widely cultivated, but the area of cultivation is increasing annually. The principal regions for growing Irish potatoes are located on the plateaus of the northeast, north, northwest, and southwest, where Irish potatoes are an important food of the farmers. In the south, Irish potatoes are grown in the mountain valleys at higher altitudes, where the temperature is lower.

Potato yields in Communist China, estimated on the basis of both sweet and Irish potatoes, averaged 73.9 centners per hectare in 1952. This figure is a slight increase (less than 1 percent) over the 1951 yield of 73.6 centners per hectare and is a 1-percent increase above the prewar average of 73.3 centners per hectare.

3. Planned Production.

All Soviet Bloc countries, with the exception of Hungary, Bulgaria, and Communist China, have published plans for increasing potato production. These plans, in most cases, are highly unrealistic, since the increases are apparently to be obtained largely through an increase in yields. Fertilizer shortages, the lack of a sufficient area of suitable soils, and in some countries a general resentment toward the land reform program will tend to hold yields down.

a. USSR.

As shown in Table 4,** the Fifth Five Year Plan (1951-55) of the USSR intends to increase potato production by means of increasing

* Includes both sweet and Irish potato acreage.

** Table 4 follows on p. 11.

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Table 4

Planned Production of Potatoes in the Soviet Bloc Including Percentage Comparisons
with Prewar Years, 1951, 1952, and Estimated Production for 1955

Area	Official Planned Production for 1955 (Thousand Metric Tons)	Percent of Prewar	Percent of 1951	Percent of 1952	Estimated Production for 1955 (Thousand Metric Tons)
USSR	112,400.0	146	159	142	90,000.0
Poland	39,750.0	105	146	168	31,000.0
East Germany	17,000.0	125	152	167	13,000.0
Czechoslovakia	9,700.0 a/	96	149	215	6,500.0
Hungary	N.A.	N.A.	N.A.	N.A.	1,700.0
Rumania	2,775.0	212	255	425	1,000.0
Bulgaria	N.A.	N.A.	N.A.	N.A.	100.0
Albania	7.7	350	188	308	4.0
Total European Satellites	N.A.	N.A.	N.A.	N.A.	53,304.0
Communist China	N.A.	N.A.	N.A.	N.A.	29,600.0
Total Soviet Bloc	N.A.	N.A.	N.A.	N.A.	172,904.0

a 1953 Plan.

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the yields. This increase is to be achieved primarily through the use of better agrotechnical methods. The Plan envisions a 40- to 45-percent increase in gross potato production over this span of years. Such an increase would result in a potato production by 1955 of 112.4 million metric tons, or a 42-percent increase above the 1952 figure of 78.9 million metric tons. Because there are no plans for the acreage, this increase would require, on the basis of present (1952) acreage, a yield of 118.7 centners per hectare. This yield would amount to an increase of 35.4 centners per hectare above the 1952 yield of 83.3 centners per hectare. It is highly unlikely that such a large increase in yield can be realized over such a short period of time even under the best of conditions. It appears likely that the potato acreage in the USSR will not tend to expand materially above the 1951 level (9.5 million hectares). It is probable, therefore, that by 1955, unless there is an exceptionally favorable combination of weather factors, potato production will not exceed 90 million metric tons.

b. European Satellites.

The European Satellites, with the exception of Hungary and Bulgaria, also have plans for increasing potato production, primarily through an increase in yields. Because of the lack of suitable arable land and fertilizer and because of a general resentment on the part of the peasants toward land reform program in some of the Satellite countries, it is unlikely that these plans can be accomplished by 1955. A total production of more than 53.3 million metric tons can not be expected in 1955.

c. Communist China.

No plans have been published concerning planned potato production in Communist China. Because of acreage limitations and the inability of the Chinese to increase yields in the past, it is doubtful that potato production in Communist China will increase materially within the next few years above the 1952 level of 29.6 million metric tons.

4. Current Utilization.

During the prewar period the Soviet Bloc normally produced enough potatoes to be self-sufficient and, in addition, to provide a surplus

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for export. Generally, all segments of the economy, including household, agricultural, and industrial consumers, received sufficient quantities in their allocations. During most of the postwar period, particularly in 1951 and 1952, because of the poor potato harvest in various parts of the Bloc, the potato supply in those countries was inadequate to meet all the needs of the economy, and serious distribution problems resulted.

Out of the total potato supply of 148.4 million metric tons available to the Soviet Bloc countries in 1952,* about 43.6 million metric tons (29 percent) were accounted for as seed and waste,** 32.9 million metric tons (22 percent) were fed to livestock, and 5.5 million metric tons (4 percent) were utilized by industry, leaving a net supply available for food of about 66.4 million metric tons (45 percent). (See Table 5.)***

The share of the potato supply available for feed in the European Satellites has been higher than that available for human consumption, mainly because of the importance of potatoes as the principal feed for hogs in some of these countries. Because of the poor potato harvest in 1952, the potato supply available for feed in the European Satellites was 37 percent below the available supply in 1951. The decrease in the 1952 supply under the 1951 level was reflected in a decrease in hog numbers by early 1953 of about 4.4 million head below the early 1952 level.

The potato supply available for industrial consumption represents a very small part of the total available supply. The principal industrial uses of potatoes in the Soviet Bloc are in the manufacture of starch and alcohol. At present, potatoes are ranked second in importance after grains as a major source of alcohol in the Bloc.

Potatoes, second in importance only to grain as a food commodity in the USSR and European Satellites, normally account for about 12 to 14 percent of the daily per capita caloric intake, whereas in Communist China they account for only 5 percent. (See Table 6.)****

* Based on original production of 148.5 million metric tons less 100,000 tons which were exported to non-Bloc countries.

** On the basis of approximately 12 percent seed and 17 percent waste.

*** Table 5 follows on p. 14.

**** Table 6 follows on p. 15.

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Table 5

Utilization of Potatoes in the Soviet Bloc
 Prewar Years Compared with 1951-52 and 1952-53

Thousand Metric Tons															
Area	Prewar				1951-52				1952-53				Net Supply Available for Food		
	Total Supply a/	Seed and Waste b/	Feed	Industry	Net Supply Available for Food	Total Supply a/	Seed and Waste b/	Feed	Industry	Net Supply Available for Food	Total Supply a/	Seed and Waste b/		Feed	Industry
USSR	76,660.0 d/	21,166.0	18,072.5	1,300.0	36,121.5	70,720.0	23,672.0	14,695.5	1,500.0	30,852.5	78,880.0	24,488.0	15,898.5	1,700.0	36,793.5
Poland	37,070.0 d/	11,100.0	13,470.0	2,500.0	10,000.0	27,300.0	5,608.0	11,663.7	2,500.0	7,528.3	23,655.0	8,549.0	6,555.0	1,500.0	7,051.0
East Germany	13,625.0 d/	3,100.0	6,000.0	925.0	3,600.0	10,952.0	3,368.8	4,123.2	500.0	2,960.0	10,062.0	2,964.0	4,000.0	530.0	2,560.0
Czechoslovakia	9,700.0 d/	2,242.0	4,658.0	600.0	2,200.0	6,518.0	1,872.8	2,396.9	392.0	1,856.3	4,505.0	1,651.0	968.0	270.0	1,610.0
Hungary	2,075.0 d/	400.0	515.0	60.0	1,100.0	2,070.0	587.0	293.3	60.0	1,129.7	1,002.0	413.2	150.0	20.0	416.8
Rumania	1,300.0 d/	325.0	175.0	0	800.0	1,088.0	381.0	100.0	10.0	597.0	653.0	305.7	50.0	5.0	293.3
Bulgaria	112.0 d/	35.0	10.0	0	67.0	103.0	30.4	5.0	0	67.6	62.0	29.0	10.0	0	29.0
Albania	1.5 d/	0.4	0	0	1.1	4.1	1.9	0	0	2.2	2.5	1.9	0	0	0.6
Total European Satellites	63,883.5	17,202.4	24,828.0	4,085.0	17,768.1	48,035.1	11,849.9	18,582.1	3,462.0	14,141.1	39,941.5	13,913.8	11,733.0	2,325.0	11,967.7
Communist China	22,150.0 e/	3,807.0	3,972.0	1,143.0	13,228.0	29,500.0	5,151.0	5,298.0	1,525.0	17,526.0	29,600.0	5,151.0	5,298.0	1,525.0	17,620.0
Total Soviet Bloc	162,693.5	42,175.4	46,872.5	6,528.0	67,117.6	148,255.1	40,672.9	38,575.6	6,487.0	62,519.6	148,421.5	43,552.8	32,929.5	5,550.0	66,389.2

a. Total supply is derived from the indigenous production plus or minus the net trade, which is negligible.
 b. on the basis of approximately 12 percent seed and 17 percent waste.

c. 1933-38.

d. 1935-39 average.

e. 1931-37 average.

Table 6

Per Capita Consumption of Potatoes in the Soviet Bloc
 Prewar Years Compared with 1951-52 and 1952-53

Area	Prewar			1951-52			1952-53		
	Kilograms Per Year	Calories Per Day a/	Percent of Daily Calorie Intake b/	Kilograms Per Year	Calories Per Day a/	Percent of Daily Calorie Intake b/	Kilograms Per Year	Calories Per Day a/	Percent of Daily Calorie Intake b/
USSR	187.8 c/	360	13.3	148.8	285	11.5	174.5	335	13.1
Poland	312.5 d/	599	23.1	297.2	570	21.9	275.0	527	20.4
East Germany	225.0 d/	431	16.5	160.0	307	14.6	138.8	266	14.4
Czechoslovakia	145.7 d/	279	12.2	145.0	278	11.7	125.0	240	11.2
Hungary	123.0 d/	236	9.6	120.6	231	9.6	144.5	85	3.0
Rumania	52.6 d/	101	4.0	36.7	70	2.9	17.9	35	1.0
Bulgaria	10.2 d/	20	0.8	9.3	18	0.8	3.1	6	0.1
Albania	1.0 d/	2	0.1	1.7	3	0.2	0.5	1	0.0
Total European Satellites	187.3	352	14.4	155.7	292	12.6	130.9	251	11.1
Communist China	27.6 e/	70	3.4	36.5	93	4.9	36.7	94	4.0
Total Soviet Bloc	87.5	168	7.4	80.3	154	7.3	84.9	163	7.1

* Footnotes for Table 6 follow on p. 16.

Table 6

Per Capita Consumption of Potatoes in the Soviet Bloc
 Prewar Years Compared with 1951-52 and 1952-53
 (Continued)

Based on a caloric factor of 700 calories per kilogram with the exception of Chinese sweet potatoes with factor of 970 calories per kilogram.
 Based on a total caloric intake of the major food items which represents from 90 to 95 percent of the total intake.
 From 1938 available supply for food.
 Based on 1935-39 average availability for food consumption.
 Based on 1931-37 average availability for food consumption.

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Because of the importance of potatoes as an integral part of the daily diet in the USSR and European Satellites, any decrease in their availability is a source of widespread dissatisfaction among the general population.

The Soviet Bloc is estimated to have consumed approximately 66.4 million metric tons of potatoes as food during the 1952-53 consumption year,* an increase of 6 percent above the 1951-52 figure of 62.5 million metric tons but 1 percent below the prewar average of 67.1 million metric tons. In terms of net per capita supply, this amounts to 84.9 kilograms per year in 1952-53, as compared with 80.3 and 87.5 kilograms per year, respectively, in 1951-52 and in the average prewar year.

The potato supply available for food in the USSR during the 1952-53 consumption year is estimated to be about 36.8 million metric tons (174.5 kilograms per capita per year). This amount is greater than the 1951-52 available net supply of 30.9 million metric tons (148.8 kilograms per capita per year) and comparable to the prewar average net supply of 36.1 million metric tons (but less than the prewar average of 187.8 kilograms per capita per year).

The potato supply available for food in the European Satellites during the 1952-53 consumption year is estimated to be about 12 million metric tons (130.9 kilograms per capita per year). This amount is less than the 1951-52 available net supply of approximately 14.1 million metric tons (155.7 kilograms per capita per year) and also much less than the prewar average net supply of 17.8 million metric tons (187.3 kilograms per capita per year).

The decrease in the 1952-53 potato supply available for food resulted from the poor 1952 potato harvest and the reluctance of the farmers to fulfill the delivery quotas to the state. Because of this situation, potatoes have been practically unattainable in the market places. Conditions have become so critical in Poland, East Germany, and Czechoslovakia that the governments of those countries have resorted to the capitalistic system of offering extra incentive cash bonuses to the people for getting out the harvest and increasing deliveries to the state.

The potato supply available for food in Communist China during the 1952-53 consumption year is estimated at 17.6 million metric tons

* A consumption year extends from 1 July to 30 June.

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(36.7 kilograms per capita per year). This amount is about the same as the 1951-52 net available supply of 17.5 million metric tons (36.5 kilograms per capita per year) and considerably greater than the pre-war average net supply of 13.2 million tons (27.6 kilograms per capita per year).

The statistics giving the per capita potato supply for food are average figures, and they are therefore not a true reflection of the consumption patterns within the various Soviet Bloc countries. For example, in the Soviet Bloc the producers of potatoes consume a larger per capita share of the supply than do the nonproducers, since part of the payment to the producer is usually in kind. In addition, when potatoes are in short supply and placed on the ration list, certain categories of the population are apportioned their ration according to party and working status. This generally leaves a very small ration for the remainder of the population who are neither party members nor workers. Such potatoes when they are available are at higher prices.

The Soviet Bloc countries during the prewar period exported an average of over 1 million metric tons of potatoes a year to all destinations. In the past 3 years, however, they have been unable to supply enough potatoes to meet their own domestic requirements. As a result, only negligible quantities, averaging around 100,000 to 200,000 metric tons a year, have been exported, principally from Poland and East Germany to both Bloc and non-Bloc destinations. In many instances, even these small quantities have placed a strain on the domestic supply.

Because of the perishable nature of potatoes and the stringent storage conditions necessary to preserve them for even a short period of time, it is highly unlikely that any potatoes are placed in reserve in the Soviet Bloc for stockpiling purposes.

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APPENDIX

SOURCES AND EVALUATION OF SOURCES

1. Evaluation of Sources.

Except for the sources noted below, all data relating to potato acreage and production are based on estimates made by CIA and the Office of Foreign Agricultural Relations, US Department of Agriculture. These estimates, in turn, are based upon Soviet statistics collated and used in previously published CIA and OFAR studies.

2. Sources.

Evaluations, following the classification entry and designated "Eval.," have the following significance:

<u>Source of Information</u>	<u>Information</u>
A - Completely reliable	1 - Confirmed by other sources
B - Usually reliable	2 - Probably true
C - Fairly reliable	3 - Possibly true
D - Not usually reliable	4 - Doubtful
E - Not reliable	5 - Probably false
F - Cannot be judged	6 - Cannot be judged

Evaluations not otherwise designated are those appearing on the cited document; those designated "RR" are by the author of this report. No "RR" evaluation is given when the author agrees with the evaluation of the cited document.

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1. The Soviet Fifth Five Year Plan is based on a report published by ORR which was abstracted from the New York Times of 23 August 1952. U. Eval. B-2.
 2. Plans for Albania are based on FBIS, 10 June 1952. R. Eval. B-2.

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